EDITORIAL

Sometimes Something Wonderful Happens

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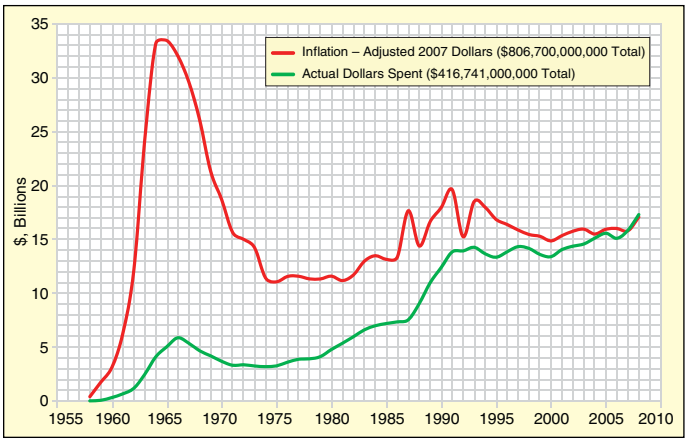
While the most destructive concept on the planet may very well be that of government, even our ponderous federal bureaucracy occasionally does something quite right. This happened on October 1, 1958, when the National Aeronautics and Space Administration (NASA) was inaugurated. For 50 years, NASA has set the world's pace for technical innovation, improving our daily lives as a by-product. What I hadn't realized until very recently was just how cost effectively they have provided this leadership.



NASA budget by year.

The recent $700,000,000,000 Wall Street "bailout" has made the term "billion" flow freely from our lips, almost without stuttering. (I still need to stop and count the zeros.) It's a number the government bandies about far more frequently than it should, a clear indication that too much power has been entrusted to it, with the result that too much wealth now resides in too few hands of the wrong type. I recently found myself struggling to appreciate the enormity of the money being taken from the U.S. Treasury (taken from the American people) and thrown to the relatively tiny investment community. NASA's 50th anniversary gave me an opportunity to appreciate the dimension of this expenditure.

The accompanying plot show NASA's annual budget from its inception until today. Note that the total expenditure for half a century of NASA operation (in actual dollars) was less than 60% of what the Congress voted to hand investment bankers almost immediately! This number does not reflect the nearly $110 billion in pork-barrel wish-lists attached to the bailout bill by congress, and this amount ought be considered when contemplating NASA's 50-year budget in terms of inflation-corrected modern dollars.

Which expenditure will history view as more prudent? Only time will tell, but I already have a very strong suspicion. It seems that entrusting money, even large amounts of money, to engineers, scientists and technicians is far safer than giving it to bankers, brokers and accountants. There is a lesson in this that we must insist the government learn – put responsibility, authority and accountability in the kinds of hands that build real things, not those that merely gesticulate with false authority to punctuate lies and promises delivered with bravado.

NASA has a long and proud record of accomplishing difficult things with regularity. It has done so by teaming this nation's best people under the guidance of technically educated administrators who understand the processes of research, development, design, manufacturing, validation and maintenance – concepts (with accompanying obligations) totally foreign to most administrators and to all lawyers. NASA evolved a synergistic kinship between talented people to generate the kind of resourcefulness and productivity that even our most jaded legislators must recognize as exemplary. (Case in point: the Apollo XXIII mission went horribly wrong and ended in triumph. I'm certain three former astronauts were very happy Mission Control housed no politicians on April 13, 1970; the nation certainly had no qualms about the job done by the NASA team that brought Lovell, Sweigert and Haise back home to us.)

In recent years, it seems congress has chosen to punish NASA rather than encourage it. Deferring funds from aerospace research to wage war and feed selfish pork barrels should no longer be acceptable. Rather than ignoring NASA, congress should financially celebrate it. Further, they should use NASA as a model for new agencies to lead to the solution of the serious energy problems that face us. Lawmakers should not be deciding our energy policies; these are issues that will require effective technical solutions that respect the laws of physics and chemistry rather than those of the House and Senate.

It is time for politicians to stop spouting from their laundry lists of energy alternatives; it is time for them to listen to the findings of serious scientific minds and then place our (now very limited) financial "bets" on those very few alternative energy candidates with the greatest probability of significant payback. Nuclear electrical generation will unquestionably be among these; we will need a NASA-like organization to develop a system of nationally standardized nuclear plants on a rapidly responding demand-tolerant grid with local power-factor optimization at every node. We will also need a solid answer to the question of what to do with spent nuclear fuel rods (or their future equivalent).

Continental American transportation cries for a solid multifaceted solution, including urban transport, suburban commuting and long-distance hauling. Congress and private industry have failed to solve these issues. Rather, they have exacerbated the problem by creating a "need" for multiple fuel-hungry personal transporters in every over-mortgaged garage while allowing our national rail system to disintegrate. The answers to these problems must include public transport as well as innovative thinking about personal vehicles. We need to stop playing congressional "5-MPH-bumper" politics with the automotive industry and turn the domestic transportation issue over to technical professionals.

For the short-term, there is no question that we must explore and mine those coal, natural gas and petroleum sites within national ownership. We citizens of planet Earth are damned to eventually use up the world's entire supply of oil, coal and gas and anything else that will give us heat, light and communication and manufacturing potential. We would be well advised to consume each such resource completely, before moving on to exploit the next energy source. Finding, unearthing and refining energy-rich fossil fuels in a sensible and scheduled way is a complex technical problem that screams to be addressed by our best engineers and scientists, not by our crassest lawyers.

We need NASA today more than ever. We need it not only for the continuing important work within its own field, but for the lessons it can provide new agencies we must form if we hope to survive and thrive again. This nation requires a technical leadership model, and NASA is uniquely qualified to provide it. More than that, we need political leaders with the fortitude and intellect to suppress their own egos and allow well qualified individuals to address the technological challenges that face the nation. We fervently hope this month's election has brought people of such caliber, insight and integrity to the nations's capital SV

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